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the present century the Catholic Church held to the notion that the earth does not move, and shows that certain Protestant sects displayed much less wisdom by clinging to the antiquated delusion even longer. "Rapid Transit" is the subject of the sixth of Carroll D. Wright's Lessons from the Census. It contains much information concerning operating expenses, relative economy of motive powers, growth of mileage, etc. An interesting study of "Involuntary Movements," by Professor Joseph Jastrow, will appear. Experiments have been made in the psychological laboratory of the University of Wisconsin which show the reality and nature of the motions on which "muscle-reading" depends. Professor Jastrow's article is illustrated with tracings of such movements, and with a figure of the simple apparatus employed in taking them. "The Great Earthquake of Port Royal," which took place in 1692, will be described by Colonel A. B. Ellis. This account corrects certain erroneous notions of the occurrence that have long prevailed, and shows that the arrangement of the present town invites a repetition of the catastrophe. The article is illustrated. The last of the articles on musical instruments in the series on the Development of American Industries will be published in the April number. It is by Daniel Spillane, and traces the evolution of the manufacture of "Orchestral Musical Instruments" in America. The article is fully illustrated.

— Charles Scribner's Sons will publish at once Edward Whymper's long-expected book, "Travels Amongst the Great Andes of

the Equator," which was announced last fall, but which they were unable to issue at that time. They have in press a new "Handbook of Great Archæology" (profusely illustrated), dealing with vases, bronzes, gems, painting, sculpture, and architecture, by A. S. Murray, keeper of Greek and Roman antiquities, British Museum. After a long delay Baedeker's "Upper Egypt" has at last been published in English, and is imported by Charles Scribner's Sons. It will be welcomed by all interested in that subject, whether travellers or students.

— Houghton, Mifflin, & Co. have published a book by the theosophist, Mr. A. P. Sinnett, on "The Rationale of Mesmerism." Mr. Sinnett is the author of "Esoteric Buddhism" and other works on theosophy, and in the present volume he professes to account for the phenomena of mesmerism, or hypnotism, on the principles of so-called occultism. He begins by rebuking the physicians and other scientific men for their refusal until very lately to study the phenomena in question or even to admit their existence; and it must be admitted that the rebuke is well deserved. The theories he advances to explain the phenomena are, however, of a very unscientific character. He asserts the existence of a magnetic fluid and also of a third principle in the nature of man, intermediate between the soul and the body, which he calls the "astral" principle; and it is by these imaginary agencies that he attempts to account for mesmerism. He tells us that there is an astral body, which "is quite visible when detached

CALENDAR OF SOCIETIES.

Biological Society, Washington.

March 5.—Fred V. Coville, Conditions affecting the Distribution of Plants in North America; Charles Hallock, The Physiology of a Pocoson; Vernon Bailey, The Homes of Our Mammals; Theo. Holm, The Flora of Nova Zembla.

Entomological Society, Washington.

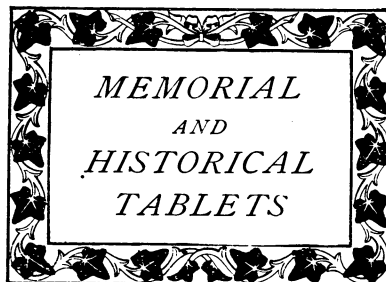
March 3.—C. W. Stiles, The Histology of Ticks; T. N. Gill, The Larval Condition of Insects an Intercalated Stage.

Appalachian Mountain Club, Boston.

March 9.—Isaac Y. Chubbuck, Up North Tripyramid on Snow Shoes; Percival Lowell, An Ascent of Fuji.

Publications received at Editor's Office.

- ARMSTRONG & NORTON. Laboratory Manual of Chemistry. New York, American Book Co. 8°. 144 p. 50 cents.
- BLAIR, J. A. The Organic Analysis of Potable Drinking Waters. Philadelphia, P. Blakiston, Son & Co. 12°. 120 p.
- BOWSER, EDWARD A. Academic Algebra. Boston, D. C. Heath & Co. 12°. 366 p. \$1.25.
- CHISHOLM AND LEETE. Longmans' New School Atlas. New York, Longmans, Green & Co. Imp. 8°. 38 Maps. \$1.50.
- CORNELL UNIVERSITY. Fourth Annual Report of Agricultural Experiment Station, 1891. Ithaca, The University. 8°. 499 p.
- DORSEY, JAMES O. Omaha and Ponka Letters. Washington, Government. 8°. Paper. 127 p.
- KARRER FELIX. Führer durch die Baumaterial-Sammlungen des k. k. naturhistorischen Hofmuseums in Wien. Wien, Eigenhuth des Herausgebers. 12°. Paper. 355 p.
- ORTON, EDWARD. Report on the Occurrence of Petroleum, Natural Gas and Asphalt Rock in Western Kentucky. Frankfort, Geological Survey. 8°. 233 p.
- RUSSELL, STUART A. Electric Light Cables. London, Whittaker & Co. 12°. 332 p. Ill. \$2.25.
- SINNETT, A. P. The Rationale of Mesmerism. Boston, Houghton, Mifflin & Co. 16°. 232 p. \$1.25.
- TAYLOR, J. TRAILL. The Optics of Photography and Photographic Lenses. New York, Macmillan & Co. 16°. 254 p. \$1.
- THOMAS, CYRUS. Catalogue of Prehistoric Works East of the Rocky Mountains. Washington, Government. 8°. Paper. 246 p.
- UNIVERSITY OF CALIFORNIA. Riverside Addresses, 1891. Berkeley, The University. 16°. Paper. 74 p.
- VERITY, JOHN B. Electricity up to Date. New York, Frederick Warne & Co. 18°. Paper. 178 p. 75 cents.
- WINSLOW, ARTHUR. Report on the Coal Deposits of Missouri. Jefferson City, The Geological Survey. 8°. 226 p.



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Finished specimens of all colors of Vermont marble for fine fossils or crystals. Will be given only for valuable specimens because of the cost of polishing. GEO. W. PERRY, State Geologist, Rutland, Vt.

For exchange.—Three copies of "American State Papers Bearing on Sunday Legislation," 1891, \$2.50, new and unused, for "The Sabbath," by Harmon Kingsbury, 1840; "The Sabbath," by A. A. Phelps, 1842; "History of the Institution of the Sabbath Day, Its Uses and Abuses," by W. L. Fisher, 1859; "Humorous Phases of the Law," by Irving Browne; or other works amounting to value of books exchanged, on the question of governmental legislation in reference to religion, personal liberty, etc. If preferred, I will sell "American State Papers," and buy other books on the subject. WILLIAM ADISON BLAKELY, Chicago, Ill.

Wanted, in exchange for the following works, any standard works on Surgery and on Diseases of Children: Wilson's "American Ornithology," 3 vols.; Coues' "Birds of the Northwest" and "Birds of the Colorado Valley," 2 vols.; Minot's "Land and Game Birds of New England," 2 vols.; Samuel's "Our Northern and Eastern Birds," all the Reports on the Birds of the Pacific R. R. Survey, bound in 2 vols., Morocco; and a complete set of the Reports of the Arkansas Geological Survey. Please give editions and dates in corresponding. R. ELLSWORTH CALL, High School, Des Moines, Iowa.

For sale or exchange, LeConte, "Geology;" Quain, "Anatomy," 2 vols.; Foster, "Physiology," Eng. edition; Shepard, Appleton, Elliott, and Stern, "Chemistry;" Jordan, "Manual of Vertebrates;" "International Scientists' Directory;" Vol. I. "Journal of Morphology," Balfour, "Embryology," 2 vols.; Leidy, "Rhizopods," Science, 18 vols., unbound. C. T. MCCLINTOCK, Lexington, Ky.

To exchange Wright's "Ice Age in North America" and Le Conte's "Elements of Geology" (Copyright 1882) for "Darwinism," by A. R. Wallace. "Origin of Species," by Darwin, "Descent of Man," by Darwin, "Man's Place in Nature," Huxley, "Mental Evolution in Animals," by Romanes, "Pre-Adamites," by Winchell. No books wanted except latest editions, and books in good condition. C. S. Brown, Jr., Vanderbilt University, Nashville, Tenn.

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from the physical body to those who are gifted in any high degree with clairvoyant vision," and that "the astral plane affords direct communion between the consciousness of the operator and the subject when the two are brought into true magnetic harmony." This explanation, as our readers will see, is no explanation at all; yet it is not a whit worse than the theory of "multiple personality" which is advocated by many French and German hypnotists. In our opinion the phenomena in question are far too intricate to be accounted for by any principles now known to us, and we believe that much more investigation and far deeper thinking are necessary before the true explanation can be given.

— The Cassell Publishing Company announce the "Record of Scientific Progress for the year 1891," exhibiting the most important discoveries and improvements in all the branches of engineering, architecture and building, mining and metallurgy, the mechanic arts, industrial technology, and the useful arts, photogra-

phy, chemistry, medicine and surgery, printing, the generation, measurement, transmission, and application of electricity, the telegraph and telephone, meteorology and aeronauty, astronomy, etc. The editor is Professor Robert Grimshaw.

— M. Camille Flammarion, the author of "Uranie," is too well known to need more than the announcement of a new volume from his pen to attract readers. His new story, "Lumen," announced by the Cassell Publishing Company, is very much in the manner of "Uranie," a scientific romance. "It is a delightful thing in these prosaic days," says a well-known critic, "to get away from the novels of realism and strike out into something of an entirely different order that lifts one into the clouds — the pun is unintentional — and takes him away from the earth. It is just this that M. Flammarion does and it is a rest to the weary brain to read his graceful stories." Mrs. Serrano, who translated "Uranie," has translated this volume.

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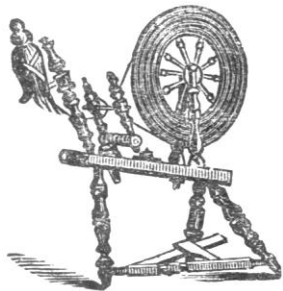
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